## E-R-SQUIBB & SONS

MANUFACTURING CHEMISTS
TO THE MEDICAL PROFESSION SINCE 1858

BIOLOGICAL AND CHEMICAL LABORATORIES
NEW BRENSWICK NEW JERSEY

WM. EDWARD BUNNEY, PH.D.

July 8, 1948

Dr. Joshua Lederberg Department of Genetics College of Agriculture University of Wisconsin Madison, Wisconsin

Dear Dr. Lederberg:

Your letter of July 1 has been forwarded to me. I regret to inform you that I am no longer working with the antiphage agents you requested, and therefore am not in a position to supply you with the culture filtrates.

Dr. Schatz has carried on further experiments with some of the active cultures at the N. Y. State Department of Health and, later, at the Sloane Kettering Institute for Cancer Research, 444 E. 68th Street, New York City. I believe he has recently left for California but if you write to him at the above address, he may have transfers of active strains which he would send you so that you could produce and test their filtrates.

The organisms concerned varied considerably in the production of antiphage agents, due to culture variants, conditions of temperature and nutrition. Also, they exhibited a selectivity of action against both phage and host cell. These facts must be kept in mind.

Perhaps you might be interested in the paper by Spizizen, J. Infectious Dis. 73: 222, 1943. Biochemical studies on the phenomenon of virus reproduction. II. Studies on the influence of compounds of metabolic significance on the multiplication of bacteriphage. Here coli phage (P<sub>1</sub>) multiplication was successfully inhibited by very low concentrations of metabolic poisons, as NaCN, Iodoacetic acid, Na-arsenite, 2, 4 dinitrophenol, p-aminophenol. By exposing successive generations of your salmonella cultures to these substances you may be able to eliminate the phage.

I am sending, under separate cover, a reprint on the antiphage investigations. You may obtain others from Dr. Schatz.

Yours very truly,

Doris I. Jones

DIJ/bg